

ABSTRACT

The electrolyte membrane of the present invention is an electrolyte membrane (1) having ionic conductivity that includes a base material (2) and 5 organic molecules having ion exchange groups, wherein the organic molecules are chemically bonded to the surface of the base material (2) to form an organic layer (3), and ions are conducted via the ion exchange groups in the organic layer (3). By providing this type of electrolyte membrane, it is possible to obtain an electrolyte membrane having ionic conductivity 10 whose configuration is different to that of a conventional electrolyte membrane.